

CLAIMS

What is claimed is:

- 5 1. A targeted therapeutic agent comprising:
a targeting entity which binds to a site of pathology;
a linking carrier; and
a therapeutic entity.
- 10 2. The targeted therapeutic agent of Claim 1, wherein the targeting entity binds
to neovasculature associated with a site of pathology.
3. The targeted therapeutic agent of Claim 1, wherein the targeting entity binds
to an endothelial receptor or a tissue accessible through a bodily fluid.
- 15 4. The targeted therapeutic agent of Claim 1, wherein the targeting entity binds
to a receptor upregulated in a tissue or cell adjacent to or in a bodily fluid.
5. The targeted therapeutic agent of claim 1, wherein the site of pathology is a
20 tumor.
6. The targeted therapeutic agent of claim 1, wherein the targeting entity is an
antibody.
- 25 7. The targeted therapeutic agent of claim 6, wherein the antibody is directed
against the marker $\alpha_v\beta_3$.
8. The targeted therapeutic agent of claim 6, wherein the antibody is selected
from the group consisting of an anti-ICAM-1 antibody, an LM609 antibody and a Vitaxin
30 antibody.
9. The targeted therapeutic agent of claim 1, wherein the targeting entity is a
peptide.

10. The targeted therapeutic agent of claim 9, wherein the peptide contains an RGD amino acid sequence.

11. The targeted therapeutic agent of claim 1, wherein the targeting entity is a small molecule ligand.

12. The targeted therapeutic agent of claim 1, wherein the targeting entity is a carbohydrate.

13. The targeted therapeutic agent of claim 1, wherein the linking carrier is selected from the group consisting of liposomes, polymerized liposomes, other lipid vesicles, dendrimers, polyethylene glycol assemblies, polylysines, capped polylysines, poly(hydroxybutyric acid), dextrans, and coated polymers.

14. The targeted therapeutic agent of claim 1, wherein the linking carrier imparts a property to the agent selected from the group consisting of multivalency, enhanced circulation lifetimes, and increased payload.

15. The targeted therapeutic agent of claim 1, further comprising a stabilizing entity.

16. The targeted therapeutic agent of claim 15, wherein the stabilizing entity is dextran.

17. The targeted therapeutic agent of claim 1, wherein the therapeutic entity is selected from the group consisting of drugs, toxins, prodrugs, and radioactive isotopes.

18. The targeted therapeutic agent of claim 1, wherein the therapeutic entity is a radioactive isotope.

19. The targeted therapeutic agent of claim 18, wherein the radioactive isotope is selected from the group consisting of iodine-125, yttrium-90, yttrium-89, indium-111; technetium-99m, and europium-152.

20. The targeted therapeutic agent of claim 18, wherein the radioactive isotope is attached to the linking entity via a chelating group.

21. The targeted therapeutic agent of claim 20, wherein the chelating group is selected from the group consisting of DOTA, DTPA, ITC-DTPA, MX-DTPA, and citrate, and derivatives of DOTA, DTPA, ITC-DTPA, MX-DTPA, and citrate.

22. The targeted therapeutic agent of claim 1, wherein the therapeutic entity is selected from the group consisting of a chemotherapeutic agent, a toxin, and a prodrug.

23. A method of treating a disease accompanied by neovascularization, comprising the step of administering the targeted therapeutic agent of claim 1 to a subject in need of such administration.

24. The method of claim 23, wherein the step of administering the targeted therapeutic agent compromises the integrity of the vasculature associated with the pathology.

25. The method of claim 23, wherein the targeted therapeutic agent also carries a targeting entity against an additional target.

26. The method of claim 25, wherein the additional target is a cancer cell marker.

27. The method of claim 23, further comprising the step of administering an additional therapeutic agent simultaneously with or subsequent to the administering of the targeted therapeutic agent.

28. The method of claim 24, further comprising the step of administering an additional therapeutic agent simultaneously with or subsequent to the administering of the targeted therapeutic agent.

29. The targeted therapeutic agent of claim 1, wherein the linking carrier is capable of encapsulating additional materials.

30. The targeted therapeutic agent of claim 29, wherein the additional materials encapsulated in the linking carrier are selected from the group comprising nucleic acids, drugs, toxins, prodrugs, radioactive isotopes, and genes encoding proteins that exhibit cell toxicity.

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31. The targeted therapeutic agent of claim 1, wherein the linking carrier is capable of attaching additional materials to the surface of the linking carrier.

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32. The targeted therapeutic agent of claim 31, wherein the additional materials attached to the surface of the linking carrier are selected from the group comprising nucleic acids, drugs, toxins, prodrugs, radioactive isotopes, and genes encoding proteins that exhibit cell toxicity.

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